

14. An electroporation chamber for poration of biological particles, comprising:
walls defining a fluid flow path;
electrodes disposed along sides of the fluid flow path, the electrodes being in
electrical communication with a source of electrical energy, whereby
biological particles moving along the fluid flow path are subjected to an
electrical field; and
the apparatus being characterized by at least one of the walls defining the fluid
flow path being elastically deformable and at least another one of the walls
defining the fluid flow path being substantially rigid.

15. The electroporation chamber of Claim 14, wherein the electrical energy is
pulsed.

16. The electroporation chamber of Claim 14, wherein the electrical energy is a
variable flux.

17. The electroporation chamber of Claim 14, wherein the at least one of the walls
defining the fluid flow path being comprised of a deformable, elastic
material comprises two of the walls being comprised of a deformable,
elastic material

18. The electroporation chamber of Claim 14, wherein the electrodes comprise
continuous band electrodes.

19. The electroporation chamber of Claim 14, wherein the electrodes further
function as a cooling device.

SUB B27

Sub C1)

SVB B3

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SUB B3
a pump for moving the biological particles along the fluid flow path; and
a controller responsive to the rate at which the pump moves the biological particles along the fluid flow path and to the interval between pulses of electrical energy.

A2
SUB C1)
23. The electroporation chamber of Claim 22, wherein the controller regulates the rate at which the pump moves the biological particles along the fluid flow path.

24. The electroporation chamber of Claim 22, wherein the controller regulates the interval between pulses of electrical energy.

SUB B4
25. An electroporation chamber for poration of biological particles, comprising:
walls defining a fluid flow path;
electrodes disposed along sides of the fluid flow path, the electrodes being in electrical communication with a source of electrical energy, whereby biological particles moving along the fluid flow path are subjected to an electrical field.

26. The electroporation chamber of Claim 25, wherein the electrical energy is pulsed.

27. The electroporation chamber of Claim 25, wherein the electrical energy is a variable flux.

28. The electroporation chamber of Claim 25, wherein the electrodes comprise